

Additional Security Measures for Work-Hour Controls for Security Force Personnel

A. Background:

These additional security measures (ASMs) are established to delineate certificate holder responsibility in response to the threat environment presently in existence in the aftermath of the events of September 11, 2001. Excessive work schedules can challenge the ability of security force personnel to remain vigilant and effectively perform their duties.

B. Scope:

Gaseous Diffusion Plants shall comply with the following ASMs to help ensure, in part, that security force personnel are not assigned to duty while in a fatigued condition that could reduce their alertness or ability to perform functions necessary to identify and promptly respond to security threats. Work-hour controls shall apply to personnel performing the following functions: armed member of the security force, guard, security shift supervisor, watchperson (i.e., watchman), and any member of the security force that is responsible for executing the certificate holder's NRC physical security plan.

C. Additional Security Measures:

1. Individual Work-Hour Controls

(a) Personnel performing the functions identified in B.1:

(1) Shall not exceed the following limits, excluding shift turnover time:

- (i) 16 hours in any 24-hour period,
- (ii) 26 hours in any 48-hour period, and
- (iii) 72 hours in any 7-day period.

(2) Shall have a minimum 10-hour break between work periods. The participation in turnover is permitted during the break period as well as off-duty physical fitness training up to 3-hours per week. Personnel transitioning from performing DOE regulated activities shall have a minimum of 48-hour break before performing the functions identified in B.

(3) May be authorized, by the certificate holder, to deviate from the limits specified in C.1(a)(1) and/or C.1(a)(2) provided:

- (i) The certificate holder could not have reasonably foreseen or controlled the circumstance necessitating the deviation;
- (ii) The General Manager, Plant Shift Superintendent or Assistant Plant Shift Superintendent has determined that the deviation is required to maintain the security for the facility;

- (iii) An evaluation is performed, in advance, by individuals with training, as provided by the certificate holder, in the symptoms, contributing factors, and effects of fatigue that determined that the individual's fitness for duty would not be adversely affected by the additional work period to be authorized under the deviation; and
- (iv) The basis and approval for C.1(a)(3) items (i), (ii), and (iii) are documented.

Note 1: An 8-hour break may be authorized as a deviation from the 10-hour requirement of C.1(a)(2) if the deviation is required for a scheduled transition of crews between work schedules or shifts.

(4) Shall be limited to 700 hours quarterly and 2600 hours annually of actual hours worked or shall be subject to the Group Work-Hour Controls of C.2.

(a) Unplanned Security Outage or An Increase in Threat Condition (i.e., increase in protective measures level as promulgated by NRC or DOE Advisory):

(1) There are no specific quarterly and annual limits for this condition.

(2) For periods greater than 90 days, the certificate holder shall take prompt action to limit hours worked in accordance with the requirements of C.1(a)(4). The use of the allowance defined in C.1(a)(4)(a)(1) shall not exceed 120 days.

Note 2: For the purposes of these ASMs, the baseline threat condition is defined as the least significant threat condition in effect in the last 120 days.

Note 3: If an increase in threat condition occurs, the requirements of C.1(a)(4)(a) apply for the increased threat condition. If the threat condition returns to the baseline threat condition, the requirements of C.1(a)(4) apply.

Note 4: If multiple increases in threat condition occur while the conditions of C.1(a)(4)(a) are in effect, the requirements of C.1(a)(4)(a)(2) reset with each increase.

Note 5: If the threat condition decreases, the new threat condition shall be compared to the baseline to determine if the requirements of C.1(a)(4)(a) apply as a result of an increased threat condition. If so, C.1(a)(4)(a)(2) shall be referenced to the date when the current threat condition was last entered as the result of an increase.

Note 6: The certificate holder shall reference changes in threat condition prior to the issuance of these ASMs to determine the baseline threat condition and whether the requirements of C.1(a)(4)(a) apply.

(b) The number and duration of approved deviations shall be reviewed by Senior Management personnel other than the individual authorizing the deviation in C.1(a)(3)(ii), and limited to the extent practicable.

(c) The certificate holder shall monitor and control individual work hours to ensure that excessive work hours are not compromising personnel alertness and performance.

2. Group Work-Hour Controls

Group average work hours for personnel performing the functions identified in B shall be controlled in accordance with the following limits or shall be limited in accordance with the Individual Work-Hour Controls of C.1(a)(4):

(a) Normal Conditions: The average number of hours actually worked by personnel performing the functions identified in B shall not exceed 48-hours per week, excluding shift turnover time and 3-hours per week of off-duty physical fitness training, averaged over consecutive periods not to exceed six (6) weeks. Personnel who did not work at least 75 percent of the normally scheduled hours during the averaging period shall not be included when calculating the average. If the group average limit is exceeded, the certificate holder shall take prompt action to reduce the average hours worked in accordance with these ASMs and take actions to prevent recurrence.

(b) Planned Security System Outages:

(1) The average number of hours actually worked by personnel performing the functions identified in B shall not exceed 60-hours per week, excluding shift turnover time and 3-hours per week of off-duty physical fitness training, averaged over consecutive periods not to exceed six (6) weeks. For planned security system outages whose duration is less than the averaging period, the limit would be 60-hours per week averaged over the duration of the condition. Personnel who did not work at least 75 percent of the normally scheduled hours during the averaging period shall not be included when calculating the average. If the group average limit is exceeded, the certificate holder shall take prompt action to reduce the average hours worked in accordance with these ASMs and take actions to prevent recurrence.

(2) The limit defined in C.2(b)(1) can be used for up to 90 days. For periods greater than 90 days, the certificate holder shall take prompt action to limit hours worked in accordance with the requirements of C.2(a). The use of the limits defined in C.2(b)(1) shall not exceed 120 days.

(c) Unplanned Security Outage or An Increase in Threat Condition (i.e., increase in protective measures level as promulgated by NRC or DOE Advisory):

(1) There are no specific group limits for this condition.

(2) For periods greater than 90 days, the certificate holder shall take prompt action to limit hours worked in accordance with the requirements of C.2(a). The use of the allowance defined in C.2(c)(1) shall not exceed 120 days.

Note 7: For the purposes of these ASMs, the baseline threat condition is defined as the least significant threat condition in effect in the last 120 days.

Note 8: If an increase in threat condition occurs while the facility is in a planned security outage, the requirements of C.2(c) apply for the increased threat condition. If the threat condition returns to the baseline threat condition during the planned outage, the requirements of C.2(b) apply using the original certificate holder-defined start date for the planned facility outage.

Note 9: If multiple increases in threat condition occur while the conditions of C.2(c) are in effect, the requirements of C.2(c)(2) reset with each increase.

Note 10: If the threat condition decreases, the new threat condition shall be compared to the baseline to determine if the requirements of C.2(c) apply as a result of an increased threat condition. If so, C.2(c)(2) shall be referenced to the date when the current threat condition was last entered as the result of an increase.

Note 11: The certificate holder shall reference changes in threat condition prior to the issuance of these ASMs to determine the baseline threat condition and whether the requirements of C.2(c) apply.

(d) Arming and Arrest Authority Security Plan (AAASP) Exercise: The average number of hours actually worked by personnel performing the functions identified in B, shall not exceed 60-hours per week, excluding shift turnover time and 3-hours per week of off-duty physical fitness training, during the period of the actual conduct of the AAASP exercise (i.e., certificate holder's exercise and DOE observed AAASP exercise).

3. The certificate holder shall be exempt from the requirements of C.1 and C.2 during declared emergencies as defined in the licensee's emergency plan.

4. Procedures

Develop or augment procedures, as necessary, for personnel within the scope of this ASM to:

(a) Describe the process for implementing the controls for hours worked specified in C.1, C.2, and C.3 of this ASM. The procedure shall specify whether the work hours shall be limited in accordance with the Individual Work-Hour Controls of C.1(a)(4) or the Group Work-Hour Controls of C.2.

(b) Describe the process to be followed if an individual reports prior to or during a duty period that he or she considers himself or herself unfit for duty due to fatigue.

(c) Document self-declarations of unfit for duty due to fatigue, if upon completion of the certificate holder's evaluation, it is determined the individual should be returned to work without a break of at least 10 hours.